



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,608	10/28/2005	Marc Gerard	71247-0036	5687

22902 7590 02/26/2007  
CLARK & BRODY  
1090 VERMONT AVENUE, NW  
SUITE 250  
WASHINGTON, DC 20005

EXAMINER
----------

UNDERWOOD, JARREAS C

ART UNIT	PAPER NUMBER
----------	--------------

2877

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/532,608

Applicant(s)

GERARD ET AL.

Examiner

Jarreas C. Underwood

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7,8 and 10 is/are rejected.
- 7) ☒ Claim(s) 3,5,6,9,11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/25/2005</u>                                                 | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

The claims are objected to because of the following informalities:

1. As to claim 7, line 13, the phrase "sensor ro measure" is assumed to be "sensor to measure".
2. As to claim 7, line 16, the phrase "one of ten directions" is assumed to be "one of the directions".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to claim 1, the claim is directed to a judicial exception such as an abstract idea; as such, pursuant to the Interim Guidelines on Patent Eligible Subject Matter (MPEP 2106), the claim must have either physical transformation and/or a useful, concrete and tangible result. The claim fails to include transformation from one physical state to another. Although, the claim appears useful and concrete, there does not appear to be a tangible result claimed. The practical application of the claimed invention cannot be realized until the information is conveyed to the user. For the results to be tangible, it would need to output to a user, be displayed to a user, stored for later use, or used in any tangible manner. Merely illuminating, arranging, rotating,

Art Unit: 2877

processing and analyzing is not sufficient to constitute a tangible result, since the outcome of the final analyzing step has not been used in the disclosed practical application nor made available in such a manner that its usefulness in a disclosed practical application can be realized. Therefore, the subject matter of the claims is not patent eligible.

Part b. *Practical Application the Produces a Useful, Concrete, and Tangible Result* under Section IV *Determine Whether the Claimed Invention Complies with the Subject Matter Eligibility Requirement of 35 U.S.C. Sec. 101*, sentence 3, in the OG Notice from 22 November 2005 states, "In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible, and concrete."

See OG Notices: 22 November 2005, "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility". MPEP 2106. Web site <http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>.

4. Claims 2-6 depend from rejected claim 1 and include all limitations of claim 1 thereby causing these claims to be rejected for the same reason.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4, 7-8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brugger (United States Patent 3,974,378) in view of Claypool (United States Patent 4,929,828), and in further view of Calhoun et al (United States Patent 3,349,906).

5. As to claim 7, Brugger teaches a device for detecting surface defects on the neck ring of a transparent or translucent container having an axis of revolution, characterized in that it comprises:

a light source (Figure 1A, elements 50, 55) adapted to illuminate by means of an incident light beam, a section of the neck ring surface of the container, along a determined incident direction (Figure 5C),

at least one linear measuring sensor (Figure 5C, elements 18 & 20, Figures 3 and 4, and column 3, lines 1-9),

means (Figure 1A, elements 54, 56) for ensuring rotation of the container about the axis of revolution through at least one rotation.

While Brugger teaches a unit for analyzing and processing the light beams received by the linear sensor (Figure 1, element 52, and Figure 6), Brugger fails to teach said unit is adapted to create an image and to analyze the image so as to identify the presence of a surface defect corresponding to a bright area. However to do so is well known as taught by Claypool. Claypool teaches a unit (Figure 5, element 50) being adapted to create an image (Figure 5, element 80, and Figures 6A, 6B, 6C) and to analyze the image so as to identify the presence of a surface defect corresponding to a bright area (column 4, line 65 through column 5, line 20). It would have been obvious to

Art Unit: 2877

one of ordinary skill in the art at the time of invention to include a unit being adapted to create an image and to analyze the image so as to identify the presence of a surface defect corresponding to a bright area, in order to increase the resolution of the location of the defect. Examiner's position is that while Claypool Figure 6B identifies a defect corresponding to a voltage drop, Claypool teaches modifications and alterations (column 5, lines 21-27) that would include corresponding a defect to a bright spot.

While Brugger teaches a sensor to measure light beams arranged to collect the light beam (Figure 5C, elements 18 & 20), Brugger fails to teach the light beams are reflected by the surface defect on the neck ring, the angle between the incident and reflection directions lying between 15 and 45.degree., preferably in the order of 30.degree., one of the directions being parallel to the axis of revolution of the container. However to do so is well known as taught by Calhoun. Calhoun teaches the light beams are reflected by the surface defect on the neck ring, the angle between the incident and reflection directions lying between 15 and 45.degree. (Figure 4, elements, 51c and 61, and column 9, lines 6-74), preferably in the order of 30.degree., one of the directions being parallel to the axis of revolution of the container (Figure 4, element 61). It would have been obvious to one of ordinary skill in the art at the time of invention to have the light beams be reflected by the surface defect on the neck ring, the angle between the incident and reflection directions lying between 15 and 45.degree., preferably in the order of 30.degree., one of the directions being parallel to the axis of revolution of the container, in order to maximize the detection of defects on the rim.

Art Unit: 2877

6. As to claim 8, Brugger in view of Claypool in further view of Calhoun discloses everything claimed, as applied above in claim 7, in addition Claypool teaches the light source, by means of an incident light beam, illuminates a radial section of the surface of the container's neck ring (Figure 4). It would have been obvious to one of ordinary skill in the art at the time of invention to have the light source, by means of an incident light beam, illuminate a radial section of the surface of the container's neck ring, in order to illuminate an entire cross-section as opposed to a single point.

7. As to claim 10, Brugger in view of Claypool in further view of Calhoun discloses everything claimed, as applied above in claim 7, in addition Claypool teaches the analysis and processing unit comprises means for analyzing the form characteristics of the bright areas in order to identify the presence of a surface defect (column 4, line 65 – column 5, line 20). It would have been obvious to one of ordinary skill in the art at the time of invention to have the analysis and processing unit comprise means for analyzing the form characteristics of the bright areas in order to identify the presence of a surface defect, in order to more rapidly detect defects.

8. As to claims 1, 2 and 4, the method would flow from the apparatus of claims 7, 8 and 10, respectively.

***Allowable Subject Matter***

Claims 3, 5-6, 9, 11-12 are objected to as being dependent upon a rejected base claim, but claims 9, 11-12 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3, 5-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, as set forth in this Office action *and* rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

9. As to claims 3 and 9, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method or apparatus wherein the light source and the linear measuring sensor are positioned so that either one of the reflection or incident directions is parallel to the axis of revolution of the container, while the other direction extends along a plane perpendicular to the radial plane of the container and parallel to the axis of revolution.

10. As to claims 5 and 11, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method or apparatus wherein the light source by means of an incident light beam, illuminates a radial section of the surface of the neck ring of the container along a determined incident direction parallel to the axis of revolution of the container, and in that the linear measuring sensor is positioned parallel to the radial plane, being oriented in a direction extending along a plane perpendicular to the radial plane and parallel to the axis of revolution.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jarreas C. Underwood whose telephone number is (575) 272-1536. The examiner can normally be reached on Monday-Friday 0600-1430.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley can be reached on (571) 272-2059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jarreas Underwood  
Patent Examiner  
Art Unit 2877  
2/12/2007



LAYLA G. LAUCHMAN  
PRIMARY EXAMINER